The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JEFFREY C. MOGUL

Appeal 2007-0663
Application 09/825,661
Technology Center 2100

Decided: August 29, 2007

Before LEE E. BARRETT, LANCE LEONARD BARRY,
and HOWARD B. BLANKENSHIP, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF THE CASE

A Patent Examiner rejected claims 1-20. The Appellant appeals therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

A. INVENTION

The invention at issue on appeal retrieves data via a network. Users of the Internet and other networks sometimes suffer undesirably long "latency," i.e., the time it takes to deliver requested data. For a user of a Web browser, for example, such latency may require the user to wait seconds or minutes while the requested text, images, audio, or applications are loaded. (Specification 1.)

The Appellant's invention seeks to reduce latency via collaboration between a client, a cache, and a HyperText Transfer Protocol ("HTTP") server. For example, the client sends a request for the data object stored at the uniform resource locator ("URL") "http://example.com/ x.gif" to the cache. If the cache finds no entry for the URL, it forwards the request to the HTTP server at example.com. The server processes the request and returns a response with a header having the following fields:

```
HTTP/1.1 200 OK
Digest: md5=HUXZLQLMuI/KZ5KDcJPcOA==
Date: Sun, 16 May 1999 02:00:04 GMT
Content-type: image/gif .
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In particular, the "Digest" header indicates that the MD5 digest of the response data equals "HUXZLQLMu//KZ5KDcJPcOA==." After receiving the header, the cache parses the fields thereof, extracts the digest, and searches a digest index to determine if any currently cached data object has a matching MD5 digest. If no such data object is cached, the cache retrieves the rest of the response. If such a data object is cached, however, the cache sends the data object to the client and avoids retrieving the rest of the response (e.g., by aborting the connection with the server). (*Id.* at 3.)

B. ILLUSTRATIVE CLAIM

Claim 7, which further illustrates the invention, follows:

> 7. A method for reducing network retrieval latency, comprising the steps of:
>
> receiving a first request for a data object;
>
> obtaining a digest value of said requested data object;
>
> inserting said digest value into a header portion of a response;
>
> sending said response, starting with said header portion; and
>
> upon receiving a second request to stop sending said response, stopping the sending of said response.

C. REJECTION

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as obvious over *The HTTP Distribution and Replication Protocol*, http://www.w3.org/TR/NOTE ("DRP") and U.S. Patent No. 5,734,898 ("He").

II. FINDINGS OF FACT ("FF")

1. DRP "provides a complete description of the HTTP Distribution and Replication Protocol (DRP)." (§ 1.)

2. "[A] client can keep the data up-to-date using the DRP protocol." (*Id.*)

3. "To describe the exact state of a set of data files, the DRP protocol uses a data-structure called an *index*." (§ 2.2.)

4. "An index is a snapshot of the state of a set of files at a particular moment in time." (*Id.*)

5. "An index not only describes the hierarchical structure of the files, but it also describes the version, size, and type of each file." (*Id.*)

6. "Once [an] initial download is complete, a client can update the content by downloading a new version of the index, and comparing it against the previous version of the index." (§ 2.3.)

7. "Because each file entry in the index has a content identifier, the client can determine which files have changed and so determine the minimal set of files that need to be downloaded in order to bring the client up-to-date." (*Id.*)

8. "Because the client can determine the exact set of files that need to be downloaded, it is possible to issue multi-file requests to get all the files at once." (§ 2.4.)

9. "When requesting a file, the client can include the content identifier in [an] HTTP GET request to the server." (*Id.*)

10. He discloses that "[a] synchronous or asynchronous method can be used for communication between a client and a server." (Col. 1, ll. 28-29.)

11. "There have been proposals of lock algorithms . . . for the synchronous method." (Col. 2, ll. 16-17.)

12. More specifically, He describes a "Basic 2 Phase Lock (B2PL)" algorithm, (*id.* l. 23), and a "Cashing [sic] 2PL (C2PL)" algorithm. (Col. 3, l. 4.)

13. Because the B2PL's "sequence of operations consists of two phases: a locking phase for reads or writes and an unlocking phase for a commit or an abort, it is called a Two Phase Lock algorithm." (Col. 2, ll. 64-67.)

14. The C2PL "algorithm is the same as B2PL in that the server places a shared lock (read lock) or exclusive lock (write or update lock)," (col. 3, ll. 5-7), followed by a commit or an abort. (*Id.* ll. 32-36.)

15. The passage of He cited by the Examiner, (Answer[1] 4), follows.

> FIG. 20 shows the operation of client A requesting a commit by the server of the update request described above. Client A sends commitRequest( ) to the server. Then the server returns commitReturn( ). Similarly, for abort operation, an abort request and abort return are transferred. In this case, since the

[1] We rely on and refer to the substitute Examiner's Answer, in lieu of the original Examiner's Answer, because the latter was defective. The original was not considered in deciding this appeal.

> server version and client. A version of object oid1 have already been updated to the same, the server will not send a version and other data to client A. This is a waste in terms of the usage of communication line.

(*Id.* ll. 32-40.)

III. ISSUE

The "Appellant makes many redundant arguments," *American Lava Corp. v. Multronics, Inc.*, 461 F.2d 836, 842, 174 USPQ 107, 111 (CCPA 1972), in his three briefs, which collectively constitute fifty pages.[2] Rather than reiterate the arguments of the Appellant and Examiner *in toto*, we focus on the issue therebetween. Finding that the "third paragraph of Section 2.4 of DRP discusses using content identifiers to avoid downloading file for a second time if the file is already in the cache," (Answer 14), the Examiner alleges, "DRP would inherently have to cancel the request in order to avoid the redundant download. If the request were not cancelled, then the download would proceed and the invention would not function as disclosed." (*Id.*) The Appellant argues, "*DRP* avoids a redundant download by a client not issuing a GET request to a server for a file that the client already possesses in its cache. Thus, a request need not be canceled, but instead the request to the server is simply not issued in the first place if the

[2] Because DRP and He collectively comprise only thirty-five pages, the fifty pages of briefs is particularly notable. The U.S. Court of Appeals for the Federal Circuit has advised, "A patentee is not required to fight tooth and nail every possibly adverse thought an examiner commits to paper, nor to advance redundant arguments for patentability." *TorPharm, Inc. v. Ranbaxy Pharmaceuticals, Inc.*, 336 F.3d 1322, 1330, 67 USPQ2d 1511, 1517 (Fed.Cir. 2003).

client determines that it already possesses the desired file in its cache." (First Reply Br. 9.)

Citing col. 3, lines 32-40 of He, (Answer 4), the Examiner also makes the following assertion.

> As disclosed by He, the abort request is sent to the server for the express purpose of stopping the transmission (i.e. stopping sending the remaining portion of the response) and thus preventing the redundant download. The "transaction" referenced by He is the updating of a file in the cache. The server foregoes sending the file as a direct result of the received abort request. Thus, He reads directly on this limitation of the claims.

(*Id.* 15.) The Appellant argues, "this refers to the server foregoing the sending of data to the client, rather than the client informing the server to stop sending a 'remaining portion' of a response." (First Reply Br. 10.) Therefore, the issue is whether the Examiner has shown that teachings from DRP or He would have suggested stopping the sending of the remaining part of a response to a request for data.

"In addressing the issue, the Board conducts a two-step analysis. First, we construe the independent claims at issue to determine their scope. Second, we determine whether the construed claims would have been obvious." *Ex Parte Filatov*, No. 2006-1160, 2007 WL 1317144, at *2 (B.P.A.I. 2007).

IV. CLAIM CONSTRUCTION

"Our analysis begins with construing the claim limitations at issue." *Filatov*, at *2. Here, independent claim 7 recites in pertinent part the following limitations: "upon receiving a second request to stop sending said response, stopping the sending of said response." Independent claims 1, 6, 10, 15, and 16 include similar limitations. Considering the limitations, all the independent claims require stopping the sending of the remaining part of a response to a request for data.

V. OBVIOUSNESS ANALYSIS

"Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious." *Ex Parte Massingill*, No. 2003-0506, 2004 WL 1646421, at *3 (B.P.A.I 2004). "In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). "'A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.'" *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, a client employs the DRP protocol to determine exactly which files have changed. (FF 6-7.) Based on that determination, the client then requests downloading of only those files that have changed. Conversely, we agree with the Appellant that "if the client determines that it already possesses [a] desired file," (First Reply Br. 9), it does not issue a request for that file. Because we also agree with the Appellant that "*DRP* avoids a redundant download by a client not issuing a GET request to a server for a file that the client already possesses," (First Reply Br. 9), we disagree with the Examiner that "DRP would inherently have to cancel the request in order to avoid the redundant download." (Answer 14.)

Turning to He, we disagree with the Examiner that "the abort request is sent to the server for the express purpose of stopping the transmission (i.e. stopping sending the remaining portion of the response) and thus preventing the redundant download." (Answer 15.) Because "the server will not send a version and other data to client A," (FF 15), in response to an abort request, the server has no response to stop sending. In other words, the client uses the abort request to cancel its request for a version and other data before any part of a response thereto can be sent.

VI. CONCLUSION

Because DRP avoids a redundant download by not issuing a request for a file that the client already possesses, and He uses an abort request to cancel its request for a version and other data before any part of a response thereto can been sent, we are unpersuaded that teachings from DRP or He would have suggested stopping the sending of the remaining part of a response to a request for data.

VII. DECISION

For the aforementioned reasons, the rejection of claims 1, 6, 7, 10, 15, and 16, and of claims 2-5, 8, 9, 11-14, and 17-20, which depend therefrom, under § 103(a) is reversed.

REVERSED

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS CO 80527-2400